Hazard ID	Situational Analysis				
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (optional)
HA-001	OM03 - Normal driving	OS04 - Highway	EN06 - Rain (slippery road)	SD02 - High speed	
HA-002	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal conditions	SD02 - High speed	
HA-003	OM03 - Normal driving	OS03 - Country Road	EN04 - Snowfall (degraded view)	SD03 - Normal acceleration	
HA-004	OM03 - Normal Driving	OS04 - Highway	EN01 - Normal conditions	SD02 - High speed	

Item Usage (function)	Situation Description	Function
IU01 - Correctly used	Normal driving on a highway during rain (slippery road) with high speed and correctly used system.	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback
IU02 - Incorrectly used	Normal driving on a country road during normal conditions with high speed and incorrectly used systam.	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane
IU02 - Incorrectly used	Nomal driving on country roads during snowfall (degraded view) with normal acceleration.	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane
IU01 - Correctly used	Normal driving on a highway during normal conditions with high speed and correctly used system.	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback

Hazard Identification			
Deviation	**Deviation Details**	**Hazardous Event (resulting effect)**	**Event Details**
DV04 - Actor effect is too much	LDW applies too much torque (above limit)	EV00 - Collision with other vehicle	High torque can make steering uncontrollable by driver hence car can collide with other vehicle.
DV03 - Function is always activated	LKA is always activated.	EV00 - Collition with other vehicle.	Driver may rely on LKA too much and may loose attention
DV19 - Sensor detection is wrong	Because of snow, sensor is unable to find correct ego lane	EV04 - Car comes off the road	Since car detects incorrect lane it will try to maintain incorrect lane and driver might not be able to gain control on time
DV02 - Function unexpectedly activated	LDW is activated even if camera sensor is stopped/disabled	EV00 - Collision with other vehicle	LDW incorrectly applies torque, making driver loose control of the vehicle.

	Hazard		
Hazardous Event Description	**Exposure (of situation)**	**Rationale (for exposure)**	**Severity (of potential harm)**
LDW applies too much torque (above limit)	E3 - Medium probability	Driving on a highway during rain can happen once a month or more depending on driver's location.	S3 - Life-threatening injuries
Drive uses function incorrectly.	E2 - Low probability	This situaltion is having very rare probability, less than 1%	S3 - Life-threatening or fatal injuries
Because of snow, sensor is unable to find correct ego lane	E2 - Low probability	Driving on country roads during snow has occures less often	S3 - Life-threatening or fatal injuries
LDW is activated even if camera sensor is stopped/disabled	E3 - Medium probability	Driving on highway with rain could happen 1% to 10% of the time	S3 - Life-threatening or fatal injuries

dous Event Classification

Rationale (for severity)	Controllability (of hazardous event)	Rationale (for controllability)
Car is on high speed.	C3 - Difficult to control or uncontrollable	Most drivers will not be able to control steering on high speed during rain.
Because of high speed it can cause fata injuries	C3 - Difficult to control or uncontrollable	Once driver looses control, it become very difficult to control vehicle
Car may collide with other road or objects	C2 - Normally controllable	Since car is normally driving with notmal acceleration, normally driver can control it.
Collision at high speed can cause fatal injuries	C3 - Difficult to control or uncontrollable	incorrect torque at high speed makes vehicle uncontrollable.

Determination of ASIL and Safety Goals	
ASIL Determination	**Safety Goal**
C	The LDW steering torque function shall be limited.
B	LKA function excess usage shall be alerted or stopped after certain time limit
A	LKA function shall alert or stop if ego lane is not detectable
C	LDW shall be disabled if one of the subsytem on which it is dependent is not working correctly.